

2004 Report to the Legislature December 21, 2004



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Executive Summary

Background

The Economic Development Commission was formed by Governor Locke in 2002 and codified by the 2003 Legislature. The Commission currently consists of 9 private-sector members. The Commission is directed in the statute to:

- Udate the state's economic development strategy and performance measures
- Provide policy advice and strategic guidance to Washington's Department of Community, Trade and Economic Development (CTED), including:
 - Strategies to promote retention, expansion and creation
 - Marketing strategies
 - Strategies to enhance cooperation between local governments, Economic Development Councils, state agencies and the Legislature
 - Assist CTED to procure and deploy private funds for business development, recruitment, and promotion.

Strategic Workplan

The Commission's 2004 Strategic Workplan consists of strategies to fuel economic development in four areas of near-term focus: business and investment recruitment; business retention and expansion; successful technology commercialization of basic and applied research; and local/regional/statewide economic development capacity building. The strategies were developed with two foundational themes: the promotion of partnership and collaboration; and support for regional strategies focused on key industry clusters. The strategies outlined in the plan are a mix of strategic planning, advocacy, cooperation with and support for local economic developers, coordination with businesses, research, and marketing.

Summary of Activities

Guidance on Statewide Marketing The Commission encouraged CTED to increase its emphasis on statewide marketing for business retention, business recruitment and tourism development. The Commission worked CTED to develop a state messaging, marketing, and branding strategy to aggressively position Washington in an increasingly competitive global marketplace. The Commission will continue to be active in the strategy's implementation, and members will serve as the first of the state's Business Ambassadors to support the needs of prospective businesses and market Washington globally.

Guidance on CTED's Discretionary Funding The Commission provided guidelines to CTED for prioritizing and evaluating its discretionary funds for economic development projects. Based on its research, the Commission recommended those funds be allocated to projects that address regional issues, involve partnerships, result in measurable impacts, are enduring once state funding and expertise has been expended, leverage other resources, and are transferable to other regions of the state.

Guidance on Targeted Industries The Commission worked with CTED to develop a Targeted Industry Strategy, to allow the agency to focus its resources and achieve greater impact and efficiency. With the Commission's help, CTED identified the following seven priority targets:

- Aerospace
- Agriculture/Food Processing
- Forest Products
- Life Sciences (Biotech and Healthcare)
- Marine Services
- Technology (Software, Electronics and Telecom)
- Tourism

Technology Commercialization The Commission initiated a project to examine the success of technology commercialization in maximizing the economic return to the state of investment in research and development of innovative technologies. The Commission formed a steering committee to examine the experience of businesses, research institutions and other stakeholders and will identify areas where state policies, resources and activities will have the highest impact on technology commercialization.

Information and Outreach The Commission maintains a website (http://www.cted.wa.gov/edcommission) and publishes an online "blog," or journal (http://www.edcommissionnews.typepad.com), to provide ongoing information about its activities. In addition, the Commission has engaged in a number of outreach activities, including focus groups around the state, invitations to local economic development partners to make presentations at quarterly meetings, participation in economic development forums and activities, and updates to appropriate legislative committees.

Statewide Strategic Plan Update The Commission worked with CTED and the Governor's Joint Economic Vitality Cabinet (JEVC) to review the 2000 Statewide Strategic Plan for Economic Vitality and determine its degree of success. In partnership with the JEVC and CTED, the Commission developed a collaborative process and timeline to update the plan in 2005, focusing on a targeted set of priorities for the state.

Review of Economic Development Programs The Commission worked with CTED and legislative staff to identify economic development statutory obligations that are not now or have never been funded. The Commission will support legislation to revise those statutes before the 2005 Legislature.

Expected 2005 Activities

The Commission will engage in the following activities in 2005:

- Assist the new administration in understanding Washington's economic vitality issues and recommended top-priority items.
- Complete the update of the Statewide Strategic Plan for Economic Vitality.
- Complete research and recommendations on strengthening the state's technology commercialization.
- Work with CTED to implement an aggressive statewide marketing strategy.
- Make recommendations to clean up the state's economic development statutes.

Background

Formation

In September 2002, Governor Gary Locke formed the Washington Economic Development Commission (Commission) to engage the business community in improving and developing the state's economy. Acting on the advice of his Competitiveness Council, the Governor created the Commission by executive order and appointed 14 private-sector business and labor leaders to provide policy oversight and long-term guidance on the best ways for the state to develop its economy.

The Commission was codified by the Legislature in its 2003 session. The legislation provided specific language to guide the Commission's activities, and established the size of the Commission at 7 to 9 members representing the state's geographic regions, range of business types, and ethnic diversity.

Purpose

The legislation directs the Commission to provide policy, strategic and programmatic direction to the Department of Community Trade and Economic Development (CTED), and to review and update Washington State's current economic development strategy and its performance measures. The Commission is also directed to assist CTED on the procurement and deployment of private funds for business development, recruitment and promotion as well as seek input from community and other business leaders throughout the state.

Statutory Obligations

The legislation that created the Commission directs the Commission to:

- Review and periodically update the state's economic development strategy, including implementation steps, and performance measures, and perform an annual evaluation of the strategy and the effectiveness of the state's laws, policies, and programs which target economic development;
- Provide policy, strategic, and programmatic direction to CTED regarding strategies to:
 - (a) Promote business retention, expansion, and creation within the state;
 - (b) Promote the business climate of the state and stimulate increased national and international investment in the state;
 - (c) Promote products and services of the state:
 - (d) Enhance relationships and cooperation between local governments, economic development councils, federal agencies, state agencies, and the legislature;

- (e) Integrate economic development programs, including work force training, technology transfer, and export assistance; and
- (f) Make the funds available for economic development purposes more flexible to meet emergent needs and maximize opportunities;
- Identify policies and programs to assist Washington's small businesses;
- Make a biennial report to the appropriate committees of the legislature regarding the Commission's review of the state's economic development policy, the Commission's recommendations, and steps taken by the department of community, trade, and economic development to implement the recommendations.

2004/05 Membership

The Commission currently consists of the following 9 members:

- Scott Morris, President, Avista Utilities, Chair
- **Ted Baseler**, President and CEO, Ste. Michelle Wine Estates
- Rick Bender, Director, Washington State Labor Council
- Melanie Dressel, President, Columbia Bank
- Diane Ellison, President and Owner, Ellison Timber
- Bill Grinstein, Executive Director of External Relations, Battelle
- Mack L. Hogans, Sr. Vice President, Weyerhaeuser
- Roger Knutzen, Owner, Roger Knutzen Farms
- Katherine James Schuitemaker, CEO, The Resonance Group

Meetings

The Commission holds regular quarterly meetings around the state. For 2005, the following meetings are scheduled:

- February 15th in Olympia
- May 17th in Spokane
- August 16th in Bellingham
- November 15th in Vancouver

In addition to regular quarterly meetings, the Commission utilizes committees and special purpose task forces on an as needed basis. In 2004, the Commission convened a Steering Committee to guide its strategic planning process, a Technology Commercialization Subcommittee, and a Marketing Subcommittee.

2004 Strategic Workplan

Process

Framework Following its formation, the Commission retained the National Association of State Development Agencies (NASDA) president, Miles Friedman, to examine economic development best practices around the country and assist with the development of a framework for a strategic workplan. Over the course of the Commission's first year and with Mr. Friedman's help, the Commission reviewed Washington's economic development practices and policies relative to those in other states, and conducted outreach throughout the state to assist with the development of a workable strategic workplan framework.

Mr. Friedman assisted the Commission in reviewing previous studies and reports on Washington; conducting interviews with business and policy leaders; facilitating five focus groups across the state; conducting group visioning exercises; participating in the Washington Economic Development Association (WEDA) meeting in Wenatchee; and reviewing best practices of other comparable states.

Once the Commission examined best practices, reviewed Washington's economic development strengths and weaknesses, and conducted outreach, it recognized that members could not successfully confront all facets of economic development simultaneously. The Commission, therefore, determined the following four initial priorities around which it would focus its strategies in the near term: (1) business and investment recruitment; (2) business retention and expansion; (3) successful technology commercialization of basic and applied research; and (4) local/regional/statewide economic development capacity building.

In its final report, Mr. Friedman suggested a number of key activities to the Commission to accomplish its tasks, including strategic planning, advocacy, cooperation with and support for local economic developers, closer coordination with and support for businesses and business groups, research on key issues, and enhanced marketing of Washington state for business and tourism.

Strategic Work Plan Elements Once the development of the framework was complete, the Commission drafted a 2004 Strategic Workplan, intended to provide a broad framework from which members could work to begin to fuel the state's economic vitality in the current year. The workplan contains a range of strategies for each of its four priority areas of focus, and provides a roadmap for the Commission to strengthen the state's overall economic development infrastructure.

The strategies in the workplan were developed with two foundational themes. First, the Commission envisions and promotes an approach to economic development where all of

the state's economic development partners are fully engaged in a cooperative and collaborative way. Second, the Commission supports statewide economic development strategies that are focused on key industry clusters and implemented on a regional basis. Table 1 contains the strategies outlined in the workplan, the area or areas of focus that each strategy addresses, and the action steps the Commission developed to respond to the strategies. A copy of the final workplan in its entirety is contained in Appendix A.

Table 1. Strategic Workplan Strategies

Strategies	Area(s) of Focus	Action Steps
Develop and implement a timeline and process to update the statewide strategic plan for economic vitality.	Recruitment, Retention/Expansion, Tech Commercialization, Capacity Building	Review the original Statewide Strategic Plan and develop a "stoplight document" to assess its success to date. Specifically identify those areas where the strategic plan has not been implemented.
		Compile and summarize material from activities that have occurred since completion of the original statewide plan that will play a role in the update.
		 Completion of Technology Strategy Formation of Washington Competitiveness Council, completion of recommendations and creation of stoplight document Initiation of Bio 21 Boeing 7E7 lessons learned Completion of Priorities of Government (POG) Re-invention of Ecology Passage of 5¢ gas tax Formation of ED Commission and finalization of ED Commission's Strategic Plan
		Compile strategic plans from state agencies whose missions affect the state's economic vitality, and extract components that are relevant to the state's strategic plan.
		Identify where the statewide plan needs to be revised and make revisions, incorporating information compiled in the second and third action steps, and aligning the updated plan with the Competitiveness Council's recommendations, the ED Commission's strategic plan and the Priorities of Government.
Review and provide feedback on	Recruitment,	Obtain feedback from stakeholders and finalize plan. Review CTED's existing performance measures, performance
CTED's performance measurements	Retention/Expansion,	measures from comparable programs in other states.
used in the evaluation of economic development-related programs and activities.	Tech Commercialization, Capacity Building	Provide guidance to CTED as it develops new performance measures for 2004 strategic planning process.
Inform and educate Legislators, key stakeholders and other economic development partners about the Commission's activities and initiatives.	Recruitment, Retention/Expansion, Tech Commercialization, Capacity Building	Develop a regularly distributed news bulletin from the Commission
Continue to advocate for solutions to	Recruitment,	Provide support letters to Legislature.
Washington's business climate issues, particularly those identified by the Washington Competitiveness Council.	Retention/Expansion, Tech Commercialization, Capacity Building	Advocate for specific issues through the Commission Bulletin
Develop criteria for the distribution of CTED's funds to ensure that allocation responds to recipients' performance, collaboration, and regional focus.	Recruitment, Retention/Expansion, Tech Commercialization, Capacity Building	Provide guidance to CTED through a Commission letter.

Strategies	Area(s) of Focus	Action Steps
Prioritize statewide industries as a focus for CTED's recruitment and retention activities, intersecting with every region of the state so as to recognize the changing importance of different sectors over time and minimize the potential for a lost opportunity.	Recruitment, Retention/Expansion	CTED will make recommendations on targeted industries upon reviewing priority industries identified by Paul Sommers, Deloitte and regional efforts.
Highlight and advocate business cases	Recruitment,	Identify and compile successful collaborative business cases.
that underscore the need for and the importance of regional collaboration for business recruitment and retention.	Retention/Expansion	Utilize Commission newsletter to highlight those cases.
Encourage regional partnerships with	Recruitment	Work through the marketing subcommittee
and among local economic development entities to maximize the impact of regional marketing resources.		Articulate the benefits of regional marketing collaboration and highlight regional marketing successes in the Newsletter.
Outline a peer-to-peer ambassador program in WA where business leaders	Recruitment	Work with CTED's business recruitment staff to link recruitment efforts to outreach by Washington's CEOs.
reach out to out-of-state businesses by engaging participation from the Governor and from company CEOs from		Work with the WA Roundtable to utilize board members' for outreach.
around the state. Work through existing organizations, such as the Washington Roundtable, where possible.		Create mechanism to coordinate ED Commission members' and WA Roundtable board members' travel schedules with outreach activities.
Direct CTED or other appropriate resources to assist in providing land information and regulations to businesses in a "one-stop" venue.	Recruitment, Retention/Expansion	Provide input to the development of CTED's new website.
Support lead business retention and expansion efforts of local Economic Development Councils.	Retention/Expansion	Implement Deloitte recommendations within CTED
Convene a cross-stakeholder committee	Tech Commercialization	Develop workplan.
consisting of both Commission and non- Commission members to develop		Identify members of stakeholder committee.
actionable recommendations for state		Craft letter of invitation to committee.
policy in the following areas of		
technology commercialization that include but are not necessarily limited to:		Schedule first meeting.
Technology transfer Capital needs Structural hurdles The needs of entrepreneurs, emerging and small businesses, and women and minority-owned businesses Tying the needs of innovation-driven businesses to R&D		
institutions and higher education. Advocate and support the creation and persistence of incentives for economic development, such as tax increment financing, and address long-term issues, such as the lending of state's credit.	Capacity Building	Send support letter to Legislators
Assist CTED with the development of economic development strategies based on results, accountability and sustainability.	Capacity Building	CTED will assure that strategies contained in the Statewide Strategic Plan are based on results, accountability and sustainability.

Summary of Activities

The Commission has embarked on a number of activities to respond to the strategies outlined in its first Strategic Workplan. Based on the strategies, the Commission has utilized a number of tools to accomplish its tasks in the first year. Among them include advocacy, the use of subcommittees, statewide outreach and information sharing, and the development of a collaborative working relationship with CTED on a number of initiatives.

The sections that follow provide detailed descriptions of the Commission's key activities that were undertaken to fulfill the objectives of the workplan strategies during 2004.

Guidance to CTED on Statewide Marketing

Strategic Marketing Effort with CTED In its first year, the Commission strongly encouraged CTED to increase its emphasis on statewide marketing for business retention, business recruitment and tourism development. The Commission fervently advocates the need to aggressively position and market the State of Washington and build a public/private approach to meet the competitive pressures that the state is currently facing. The Commission's early review of state spending on marketing relative to other states revealed that Washington's investment on marketing ranks near the bottom. It is the Commission's ardent belief that a significant investment in marketing the state is essential for the future economic health of Washington and will provide a substantial return on investment.

The Commission has worked closely with CTED to develop a strategy for a significant realignment and enhancement of statewide marketing and branding efforts. During 2003 and 2004, the Commission participated in a task force with members of the Washington Economic Development Association (WEDA) and CTED's Economic Development staff to develop a statewide marketing strategy intended to make Washington more competitive. The work of the task force formed the basis for CTED's Marketing Washington proposal, a comprehensive messaging, marketing and branding strategy that will be implemented by the public and private sectors in partnership across the state. As directed by the task force, CTED will lead the implementation of the strategy.

In a letter to Governor Locke in October, 2004, the Commission urged the Governor to consider the importance of CTED's marketing proposal in the preparation of the state's upcoming budget. The Commission noted that although it supports efforts to assure the fiscal accountability of the state, it believes the investment will provide a significant return, and is critical for positioning the state as it faces intense national and international competition for business. A copy of the Commission's letter to the Governor is attached in <u>Appendix B</u>.

The Commission will continue to be active in marketing Washington as the strategy is implemented by CTED and its partners.

Ambassador Program The Commission advised CTED to mobilize private sector business leaders to serve as "ambassadors" to champion the Marketing Washington strategy. Ambassadors will be invaluable assets who will host, encourage, support and champion the needs of prospective businesses as well as to proactively market Washington globally in concert with their regular business activities. The Commission is working with CTED to launch the Ambassador Program. Commission members will serve as the first of Washington's business ambassadors and will work to recruit additional business leaders as ambassadors.

Washington's new business ambassadors will be used to promote the state as a premier location for new or expanding businesses by:

- Meeting with out-of-state business leaders interested in expanding or relocating to Washington,
- Hosting facility tours or recruitment events for visiting business representatives or site selectors,
- Participating in presentations and discussions to educate business leaders about the benefits of doing business in Washington.

Guidance to CTED on Discretionary Funding

As a result of its analysis and the experiences of local economic development partners, the Commission encouraged CTED to concentrate the allocation of its discretionary funds for economic development on projects whose design and purpose were likely to yield the most successful results.

The Commission worked closely with CTED over the past year to enhance the focus and efficiency of its economic development activities, particularly in light of the current budget environment. The Commission not only reviewed best practices from around the country, but invited local economic development partners from around the state to share their successes and recommendations at the Commission's quarterly meetings. Based on that research, the Commission provided guidelines to CTED for evaluating and prioritizing its discretionary investments. Projects that yield the most successful results:

- address significant **regional** issues or problems.
- involve **partnerships**, particularly between the public and private sectors, and partners should embrace a collaborative approach to achieving project goals.
- result in measurable **impacts**.
- are **enduring**, and able to continue independently once state funding and expertise has been expended.
- · leverage other resources, and
- are **transferable**, or able to be easily replicated by other regions of Washington.

A copy of the letter outlining these criteria to CTED from the Commission is attached in Appendix C.

As a result of the Commission's guidance, CTED has provided financial and technical support to a number of regional partnerships around the state. In addition, CTED and the Commission are working together to better focus the agency's resources around targeted industries, as discussed in detail in the following section. The targeted industry strategy will allow CTED to formalize an approach to strengthening Washington's regional strengths and allocate discretionary funding consistent with the Commission's letter.

Guidance to CTED on Targeted Industries

Targeted Industry Strategy In its strategic workplan and in working with CTED, the Commission has clearly communicated its support for statewide economic development strategies that are focused on key industry clusters and implemented on a regional basis. In response to the Commission's direction and with the Commission's involvement, CTED is currently developing a strategy to allow the agency to focus its resources to achieve greater impact and efficiency, particularly in these challenging economic times. The strategy will allow CTED to provide superior support to its clients through an integrated approach to service delivery. The approach is aimed at strengthening Washington's target industries of strategic importance and supporting regional cluster efforts around the state. With the Commission's help, CTED has identified seven priority industry targets for the agency's economic development focus:

- Aerospace
- Agriculture/Food Processing
- Forest Products
- Life Sciences (Biotech and Healthcare)
- Marine Services
- Technology (Software, Electronics and Telecom)
- Tourism

In selecting these seven industry targets, the Commission and CTED examined various studies on Washington's key industry clusters and considered expertise and industry focus already in place within the agency. The targets represent industries that are crucial to the economic future of Washington, where the state has a clear competitive advantage, and those that the agency is best able to help support. The Targeted Industry Strategy is the framework under which CTED's statewide marketing plan will be implemented.

Consistent with the Commission's direction, CTED will utilize a "cluster" approach to help strengthen the economic momentum of those targets. That is, the agency will look not only to support the critical health of and economic growth in end product businesses of those industries, but support the health of and growth in businesses within the target industry's supply chain as well.

Implementation of the target industry strategy will involve the formation of service delivery teams across CTED's divisions around target industries. These teams will support targeted industries by developing additional industry expertise, identifying and utilizing CTED's available tools (recruitment, marketing, trade shows, financing and technical assistance), carrying out client calls for new businesses, and developing performance measures to ensure team activities result in increased business for Washington. In addition, CTED will assist local economic development efforts with *their* identified targeted industries by forwarding leads, coordinating complementary activities, and supporting development of those industry targets.

Loaned Executives The Commission is helping CTED identify and acquire additional resources and expertise to implement the Targeted Industries Strategy in the form of "loaned executives" from the private sector. Loaned executives are business employees with particular expertise who will be "on loan" to CTED for a specific time to meet a specific, short-term need. Drawing upon the talent, expertise and insight of loaned executives will allow CTED to enhance its economic development efforts in Washington by accessing talent from the business community around the state.

Technology Commercialization

In its first year, the Commission formed a subcommittee to focus on one of the near-term areas of focus identified its Strategic Workplan—the importance of successful technology commercialization in maximizing the economic return to Washington of its federal, state, public and private investment in research and development of innovative technologies which hold commercial promise. To fully address this area, the Commission initiated a project to assess what's working, what's not working, and what, if anything, the state can be doing to increase the rate at which innovative technologies are successfully commercialized in Washington.

The Commission's subcommittee formed a technology commercialization steering committee, comprised of both private-sector members and representatives of publicly-funded research institutions, to examine the experiences of businesses, research institutions, inventors and other stakeholders, and to provide guidance to its process. The steering committee is currently conducting focus groups with businesses, investors, researchers and research institutions around the state to understand directly from those involved what's working and what's not, in order to develop sound, actionable recommendations to the Commission, and in turn to the incoming Governor and Legislature.

An initial outcome of the work of the technology commercialization steering committee is the publication of a paper outlining the complex and multi-tiered set of factors affecting the success of technology commercialization. A copy of this paper can be found in Appendix D.. The steering committee will be examining those areas where state policies, resources and activities will have the highest impact on deriving maximum benefit from development and commercialization of innovative technologies from our state's research institutions.

Information and Outreach

Commission Website and Newsletter In an effort to provide ongoing information about its activities to partners and interested persons around the state, the Commission maintains a website, has sent out periodic newsletters summarizing its activities, and has recently developed an online news and information source in the form of a "blog". A blog is simply a journal available on the web, and is updated regularly using software that allows postings in chronological order with the most recent additions featured most prominently. The Commission's blog also allows a forum for readers to respond to the information, or to other readers' comments.

The Commission's website provides background information about the Commission and information about the quarterly meetings. The website can be accessed at http://www.cted.wa.gov/edcommission.

The Commission's blog features articles from its chair and CTED's director, as well as updates concerning the Commission's activities, and highlights of successful economic development activities around the state. The new blog can be accessed online at http://www.edcommissionnews.typepad.com.

Outreach The Commission has engaged in a number of activities to conduct outreach to economic development partners around the state. In addition to the newsletter, described above, the Commission held focus groups in Wenatchee, Aberdeen and Spokane, and conducted stakeholder interviews statewide as it developed the framework for its Strategic Workplan.

The Commission has also benefited from presentations made by local economic development entities from around the state to share information and suggestions at each of its quarterly meetings. The Commission has participated in statewide economic development forums and activities, including WEDA's meetings and the annual Governor's Economic Development Conferences. Finally, the Commission has provided updates to both the Washington State Senate and House of Representatives.

Statewide Strategic Plan Update

The Commission is directed by statute to "review and periodically update the state's economic development strategy, including implementation steps, and performance measures, and perform an annual evaluation of the strategy..." In its first year, the Commission has completed considerable work on updating the state's strategy.

The Commission worked with CTED and the Governor's Joint Economic Vitality Cabinet (JEVC) to review the existing Statewide Strategic Plan for Economic Vitality. This plan had been created in 2000 by CTED at the request of Governor Locke to develop a strategic plan on economic vitality for the state of Washington. The 2000 strategic plan was shaped over the course of a year with input from the state agencies that

comprise the JEVC, a group created by the Governor in 1999 to coordinate the state's economic development strategies, as well as with input from stakeholders and partners from around the state. The plan was intended to provide a broad framework from which Washington's public sector can contribute to the state's economic vitality in the coming years.

In 2004, the Commission reviewed the plan's design and degree of success. Members of the JEVC helped the Commission compile information about tasks completed, those underway, and those yet to be accomplished related to the goals and strategies contained in the plan.

Once that information had been compiled, the Commission met jointly with the JEVC to discuss the update. The discussion led to the formulation of a process and timeline in 2005 to complete the update. The process and timeline were shaped with a number of considerations in mind. First, the update is designed to be a collaborative effort between the Commission and the JEVC, with ownership and investment by both. The updated plan will focus on a targeted set of priorities for the state. Based on those priorities, the plan will identify specific strategies that one or two agencies will lead. The update is intended to be completed prior to the deadline for agencies to finalize their strategic plans, and for economic development to play a role in those plans by collaboratively developing activities of those agencies whose work impacts Washington's economic vitality.

A copy of the draft update process and timeline can be found in Appendix E.

Review of Economic Development Programs

The Commission has worked with CTED and legislative staff to review and make recommendations concerning CTED's statutory obligations and programs related to economic development. An examination of the statutes revealed that a number of statutes direct CTED to conduct programs that are not or have never been funded. In addition, the review highlighted other housekeeping matters that the Commission recommends need to be addressed. The Commission will support revisions to the statutes to address these issues in the 2005 Legislative session.

Expected 2005 Commission Activities

In the coming year, the Commission expects deliver five key elements to help drive improved economic vitality for Washington's businesses:

- The Commission will assist the incoming Governor and administration in quickly gaining a thorough understanding of Washington's competitive economic development status relative to other states, in a global economy, and increasingly, relative to other countries who are targeting the same growth-industry sectors as Washington. It will also provide recommendations on the top-priority items necessary for Washington to more fully emerge as a viable and attractive competitor for businesses that will add to the fuel for long-term job growth and economic vitality here in our state.
- The Commission will work together with agencies that comprise the Joint Economic Vitality Cabinet to update and publish the Statewide Strategic Plan for Economic Vitality, guiding the direct work of the State which impacts economic development.
- The Commission will complete its research and recommendations on strengthening technology commercialization in Washington, helping Washington and Washington State businesses derive maximum benefit from innovative technology research done here in our state.
- The Commission will work with CTED to implement an aggressive statewide marketing strategy. Commission members will serve as the state's first business Ambassadors and will recruit fellow business leaders to act on Washington's behalf to attract, retain and grow healthy Washington businesses that help create good jobs for the people of our state.
- The Commission will make legislative recommendations to clean up Washington State's statutes surrounding economic development, helping to focus scarce resources on funded activities with the highest economic impact.

Appendix A: Washington Economic Development Commission 2004 Strategic Workplan

Background

In September 2002, Governor Gary Locke formed the Washington Economic Development Commission (Commission) to engage the business community in improving and developing the state's economy. Acting on the advice of his Competitiveness Council, the Governor created the Commission by executive order and appointed private-sector business leaders to provide policy oversight and long-term guidance on the best ways for the state to develop its economy.

The Commission was codified by the Legislature in its 2003 session. Following a period of transition including a reduction in size, the Commission will consist of 7 to 9 members representing the state's geographic regions and ethnic diversity.

The legislation directs the Commission to provide policy, strategic and programmatic direction to the Department of Community Trade and Economic Development (CTED), and to review and update Washington State's current economic development strategy and its performance measures. The Commission is also directed to assist CTED on the procurement and deployment of private funds for business development, recruitment and promotion as well as seek input from community and other business leaders throughout the state.

Statutory Obligations

The legislation that created the Commission provides specific language to guide its activities. Significant for the strategic planning effort, the language directs the Commission to:

- Review and periodically update the state's economic development strategy, including implementation steps, and performance measures, and perform an annual evaluation of the strategy and the effectiveness of the state's laws, policies, and programs which target economic development;
- Provide policy, strategic, and programmatic direction to the department of community, trade, and economic development regarding strategies to:
 - (g) Promote business retention, expansion, and creation within the state;
 - (h) Promote the business climate of the state and stimulate increased national and international investment in the state;
 - (i) Promote products and services of the state;

- (j) Enhance relationships and cooperation between local governments, economic development councils, federal agencies, state agencies, and the legislature;
- (k) Integrate economic development programs, including work force training, technology transfer, and export assistance; and
- (l) Make the funds available for economic development purposes more flexible to meet emergent needs and maximize opportunities;
- Identify policies and programs to assist Washington's small businesses;
- Make a biennial report to the appropriate committees of the legislature regarding the Commission's review of the state's economic development policy, the Commission's recommendations, and steps taken by the department of community, trade, and economic development to implement the recommendations. The first report is due by December 31, 2004.

Framework for Strategic Planning

The State of Washington has seen continually declining support for economic development at the state level at a time when opportunities for Washington's traditional and technology based business sectors are significant and competition from other states and aggressive global suitors for these businesses is higher than ever. Domestically, the competition among states to attract and retain job-generating businesses is especially fierce and the demonstrated adaptation of these states to the innovation economy and new ways to conduct economic development is well documented.

The Commission strongly advocates the need to aggressively position and market the State of Washington and build a catalytic public/private approach to meet these competitive pressures. Given the state's continuing budget challenges, the Commission's role is to guide Washington's economic development priorities, determine the state's core economic development policies and programs, and seek partnerships to carry them out.

The 2004 Strategic Plan is intended to provide a broad framework from which the Commission can contribute to the state's economic vitality in the current year. The strategies provided in this plan have been developed to position the Commission in a key role in strengthening the state's overall economic development infrastructure.

Guiding Principles

The Commission has adopted the following principles to guide its efforts:

How the Commission will work:

The Commission will proactively focus on immediate needs and recommend actions that can demonstrate meaningful results in the short term, while developing a compelling, actionable plan for success over the long term.

- The Commission will reach out to key stakeholders to gain input / perspective on needs and desires of and where workable, include them as collaborators in the Commission's work.
- Powerful best practices in economic development from other states / regions will be gleaned and combined as springboards to creatively accelerate the impact of Washington's own economic development initiatives. The Commission will seek a mix of elements to stimulate, build and maintain a healthy economy in our state.

What the Commission will address:

- The most realistic solutions will be creatively combining both public and private funding sources; we will not allow lack of currently-available public funding to become the Achilles heel which relegates Washington to the status of long-term "also ran" in the fierce state-to-state competition for business location / relocation. These solutions will need to include policies, programs, tools and actions.
- A skilled workforce is vital to the growth of high-paying jobs, and Washington must not abandon its investment in its future—the linkage between higher, professional, and continuing training and education and a vibrant business economy is well proven. The people of our state are among our greatest natural assets; impoverished choices that continue to reduce support for workforce education will drain the very fuel tank of Washington's economic engines.
- Washington State has unique natural, cultural, business, science/technology and educational assets (among others) that serve as raw material for differentiation and business attraction/retention.

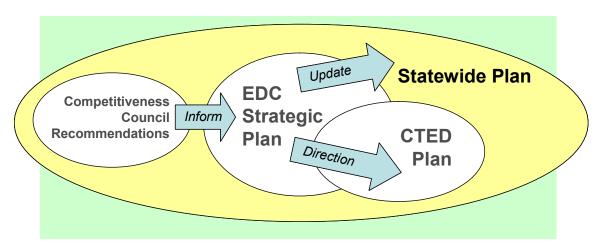
What the Commission will focus on:

- The work of the Commission will benefit people, communities and industry clusters across the state, and work aggressively to bring both sides of the Cascades together to recognize and act upon their economic interdependencies.
- "Economic Development" will encompass the attracting, retaining, starting and growing a diverse base of proven and promising businesses in Washington State as well as markets for Washington State products, services and resources.
- To ensure the tangible impact of the work of the Commission, and to ensure the outcomes envisioned by the Governor and the people of the State of Washington, the Commission will identify and secure funding for its work, and outline highly probable sources of funding for its economic development recommendations from a creative blend of public and private resources.

- Members of the Commission are committed to rising to the challenge of making a tangible and substantial difference for the present and future of Washington State during our four-year tenures on the Commission.
- The work of the Commission, including its Strategic Plan, will be based on measurable outcomes and return on investments. The work will recommend leveraging and coordination of local, regional and statewide resources and partnerships and will identify policies, programs, tools and resources that will enable the most fruitful outcomes. Commission plans will make explicit a means of oversight on statewide accomplishments against plan, reporting of status against plan to the Governor, and recommendations for modification as appropriate.

Planning Sequence

The Commission is chartered with review, development and updating of the state's strategic economic development plans. For clarity, their relationship is depicted here:



Springboarding from the recommendations of the Competitiveness Council, the Commission will develop an overarching economic development strategy for the state, and then apply this approach to both updating Washington's Statewide Plan (which encompasses many stakeholders and a four-year timeline,) and to providing guidance and direction to CTED in its detailed economic development plans (which encompasses primarily the focus of CTED and its partners). The two plans are, by nature, closely interrelated.

Areas of Focus

Recognizing that it cannot successfully confront all facets of economic development simultaneously, the Commission has identified four priorities around which it will focus its strategies in the near term. In doing so, the Commission also recognizes the value of many other priorities as endeavors to be pursued in the longer term. The areas of focus, both near-term and longer-term, are summarized as follows:

Near Term:

- Business and investment recruitment
- Business retention and expansion
- Continuum from research enterprise to successful commercialization
- Local/regional/statewide economic development capacity building

Longer-Term:

- Entrepreneurship
- Targeted sectors and industry clusters
- Workforce training and development
- International trade
- Tourism
- Value-added natural resources

Development of the Strategic Plan

The Commission retained the National Association of State Development Agencies (NASDA) president, Miles Friedman, to develop a framework around which the strategic plan may be implemented. Over the course of the Commission's first year and with NASDA's help, the Commission examined economic development best practices in other states and conducted outreach throughout the state.

NASDA reviewed previous studies and reports on Washington; conducted one-on-one interviews with business and policy leaders; facilitated five focus groups around the state; conducted group visioning exercises; participated in the WEDA meeting in Wenatchee; reviewed best practices of other comparable states; and consulted extensively with state leaders and a steering committee of the Commission. In all, NASDA consulted with over 100 Washingtonians about the strategic plan.

In its recommendations, NASDA identified six categories of priority activities. The six categories are:

- strategic planning
- advocacy
- cooperation with and support for local economic developers
- closer coordination with and support for businesses and business groups
- research on key issues; and
- enhanced marketing.

Working to incorporate the many aspects of strategic planning that occurred throughout its first year, the Commission has considered its Guiding Principles, Areas of Focus, and NASDA recommendations to develop a strategic action plan for the remainder of 2004.

The strategies in the following section constitute the first draft of the Commission's Strategic Action Plan.

Strategic Action Plan Elements

Several themes underpin each of the strategies the Commission has developed and pertain to the overall strategic plan. First, the Commission promotes a collaborative approach to economic development. In today's interdependent global economy, the state's full potential for economic vitality can only be realized when all of its economic development partners are fully engaged in a cooperative and collaborative way.

Second, the Commission strongly supports economic development strategies that are implemented on a regional basis, and focused on key industry clusters. Such strategies allow Washington's diverse regions to leverage their unique assets to encourage business expansion and create job growth. Third, the Commission strongly favors policies that help build our state's small and emerging businesses and women- and minority-owned businesses while attracting and retaining the medium and large enterprises that act as a catalyst for targeted industry clusters. Fueling the success of both small and emerging businesses, often tied to larger economic enterprise either geographically or through cluster activities, is a critical link in our collective economic well-being.

Finally, the Commission emphatically supports the ongoing work of the Governor's Competitiveness Council to identify business competitiveness issues in Washington and develop actionable recommendations aimed at addressing them.

The Commission has identified the following strategies to address each of its four near-term areas of focus in the current year. Successful implementation of each of these strategies will be conveyed in a periodic report similar to the Competitiveness Council's Scorecard.

Strategies Influencing All Four Near-Term Areas of Focus:

- Develop a timeline and process to update the statewide strategic plan for economic vitality.
- Develop performance measurements to evaluate the ongoing success of CTED's economic development-related programs and activities.
- Identify ways to help with the Governor's Priorities of Government (POG) budget process to ensure business expansion, retention and growth remain at the forefront as a key to our state's economic future.
- Continue to advocate for solutions to Washington's business climate issues, particularly those identified by the Washington Competitiveness Council.

- Advocate for human capital development in Washington.
- Form subcommittees on the Economic Development Commission to accomplish work with limited resources.

Strategies for Focus Area #1: Business and Investment Recruitment

- Conduct a comprehensive review of CTED's funding and process structure for business recruitment activities and provide criteria for the distribution of those funds that responds to recipients' performance, collaboration, and regional focus.
- Identify statewide priority industries as a focus for CTED's recruitment activities, intersecting with every region of the state so as to recognize the changing importance of different sectors over time and minimize the potential for a lost opportunity.
- Work with CTED to ensure clarity, beneficial cooperation and collaboration with local and regional ED stakeholders, and results-focused effectiveness in the implementation of "Best of the West" recommendations made by Deloitte regarding effective business attraction from a site selector's perspective.
- Highlight business cases that underscore the need for and the importance of regional collaboration for business recruitment efforts.
- Encourage regional partnerships with and among local economic development entities to maximize the impact of regional marketing resources.
- Develop performance metrics to measure the tangible return on the state's marketing investments.
- Identify and implement tactics to engage capital funding resources that influence the start-up and growth of new businesses in Washington.
- Outline a peer-to-peer ambassador program in Washington where business leaders reach out to out-of-state businesses by engaging participation from the Governor and from company CEOs from around the state. Work through existing organizations, such as the Washington Roundtable, where possible.
- Conduct outreach with associations and key stakeholders to inform, educate and collaborate on the Commission's business recruitment initiatives.
- Meet with key legislators to inform and educate about the Commission's recruitment activities.
- Look for ways in which CTED or other appropriate resource can assist in providing land information and regulations to businesses in a "one-stop" venue.

• Encourage recruitment of new investments by assessing and demonstrating the return on historic and current capital investments in Washington State.

Strategies for Focus Area #2: Business Retention and Expansion

- Conduct a comprehensive review of CTED's funding and process structure for business retention and expansion activities and provide criteria for the distribution of those funds that responds to recipients' performance, collaboration, and regional focus.
- Work with CTED to ensure clarity, beneficial cooperation and collaboration with local and regional ED stakeholders, and results-focused effectiveness in the implementation of "Best of the West" recommendations made by Deloitte regarding effective business retention and expansion from a site selector's perspective.
- Highlight business cases that underscore the need for and the importance of regional collaboration for business retention efforts.
- Encourage efforts for companies and industries to identify and link with other players in their industry ecosystems to foster collaborative policies and other issues to fuel their continuing success.
- Identify statewide priority industries as a focus for CTED's retention and expansion activities, intersecting with every region of the state so as to recognize the changing importance of different sectors over time and minimize the potential for a lost opportunity.
- Refine CTED's retention and expansion strategies based on the particular needs of specific target industries.
- Identify barriers to growth for existing businesses.
- Identify processes and resources to retain or expand businesses with needs that their local areas cannot meet elsewhere within Washington State.
- Support lead business retention and expansion efforts of local Economic Development Councils.
- Conduct outreach with associations and key stakeholders to inform, educate and collaborate on the Commission's business retention and expansion initiatives.
- Meet with key legislators to inform and educate about the Commission's retention and expansion activities.

Strategies for Focus Area #3: the Continuum from Research Enterprise to Successful Commercialization

- Convene a cross-stakeholder committee consisting of both Commission and non-Commission members to develop actionable recommendations for state policy in the following areas of technology commercialization that include but are not necessarily limited to:
 - Technology transfer
 - Capital needs
 - Structural hurdles
 - The needs of entrepreneurs, emerging and small businesses, and women and minority-owned businesses
 - Tying the needs of innovation-driven businesses to R&D institutions and higher education.

Strategies for Focus Area #4: Local, Regional and Statewide Capacity Building

- Identify best practices drawn from the experiences with Boeing and develop protocol for appropriate application of those practices to other regions and priority clusters for Washington.
- Advocate and support the creation and persistence of incentives for economic development, such as tax increment financing.
- Assist CTED with the development of economic development strategies based on results, accountability and sustainability.
- Develop recommendations to clarify criteria for the allocation of CTED's economic development funding for regional projects.
- Address and develop recommendations for long-term issues impacting the state's economic vitality, such as the lending of state's credit issue.

Appendix B: Guidance to CTED on Discretionary Funding



July 1, 2004

Juli Wilkerson, Director Department of Community Trade and Economic Development PO Box 42525 Olympia, WA 98504-2525

Dear Ms. Wilkerson:

The Washington Economic Development Commission is writing to urge the Department of Community Trade and Economic Development (CTED) to concentrate the allocation of its discretionary funds for economic development on projects whose design and purpose adhere to the following criteria:

- Projects should address significant regional issues or problems that are regional in scope.
- Projects should involve partnerships, particularly between the public and private sectors, and partners should embrace a collaborative approach to achieving project goals.
- Projects should result in measurable impacts.
- Projects should be enduring, and able to continue independently once state funding and expertise has been expended.
- Projects should leverage other resources.
- Finally, projects should be transferable, or able to be easily replicated by other regions of Washington.

The 2003 legislation that established the Economic Development Commission directs the Commission to "provide policy, strategic and programmatic direction" to CTED as it endeavors to improve and develop the state's economy. To accomplish this, the Commission has examined and reviewed the agency's economic development programs and resources, as well as the economic development activities of CTED's partners around the state. In addition, the Commission has studied economic development best practices from around the country.

In its review of economic development best practices around Washington and in other states, the Commission has observed that the most successful projects, and those that provide the best opportunity to attract and retain jobs and businesses in Washington's communities, are those that conform to the criteria identified above. Gauging projects by those criteria provides a means for CTED to allocate its discretionary funds in such a way as to be most effective and maximally leveraged, particularly in the current fiscal environment.

Sincerely,

Scott Morris Chair

Ted BaselerStimson Lane Vineyards & Estates

Rick Bender Washington State Labor Council

Melanie Dressel Columbia Bank

Diane Ellison Ellison Timber

Bill Grinstein Battelle

Mack Hogans Weyerhaeuser

Roger Knutzen Roger Knutzen Farms

Scott Morris Avista Utilities

Katherine James Schuitemaker The Resonance Group

Appendix C: Letter to Governor Locke on Statewide Marketing



October 26, 2004

Governor Gary Locke Office of the Governor PO Box 40002 Olympia, WA 98504-0002

Dear Governor Locke:

Ted BaselerStimson Lane Vineyards & Estates

Rick BenderWashington State Labor Council

Melanie Dressel Columbia Bank

Diane Ellison Ellison Timber

Bill Grinstein Battelle

Mack Hogans Weyerhaeuser

Roger Knutzen Roger Knutzen Farms

Scott Morris Avista Utilities

Katherine James Schuitemaker The Resonance Group

The Washington State Economic Development Commission is writing to express its strong support for CTED's proposed enhancement for statewide marketing.

In 2002, the Washington Competitiveness Council's Task Force on Economic Development found that the state's economic development infrastructure has been substantially weakened over time. In fact, the Commission's examination of the state's spending on economic development relative to our competitors revealed grim statistics. Washington ranks near the bottom.

One specific recommendation that the Task Force made to the Competitiveness Council was to provide CTED an appropriate level of funding to implement the current development of a comprehensive messaging, marketing and branding strategy to be administered in partnership with the public and private sectors. The Commission believes this marketing enhancement proposal represents an opportunity for Washington to take a critical step in the right direction at a time when the state is in a unique position to take advantage of marketing opportunities that are on the horizon.

The Commission is working closely with CTED on its marketing efforts, and will continue to do so to ensure their success. In addition, Commission members will serve as the first of the business ambassadors for the state.

We hope you consider the importance of CTED's proposal as you craft your budget. While we support efforts to assure the fiscal accountability of the state, we believe these investments will provide a significant return, and are critical for positioning the state as it faces intense national and international competition for business.

Thank you in advance for your consideration of the marketing enhancement proposal.

Sincerely,

Scott Morris Chair **Appendix D:** Enhancing Washington State's Economic Benefit from Commercialization of Technology Developed at Our Research Institutions



Prepared by the Technology Commercialization Steering Committee of the Washington Economic Development Commission, with core contributions by Lee Cheatham and staff from Washington Technology Center, Eric Stenehjem of Pacific Northwest National Laboratory, James A. Severson, Vice Provost for Intellectual Property and Technology Transfer, and James N. Petersen, Vice Provost for Research at WSU.

Enhancing Washington State's Economic Benefit from Commercialization of Technology Developed at Our Research Institutions

The Washington State Economic Development Commission's (EDC) objective is to enhance the economic benefits of technology commercialization in Washington. The EDC is reaching out to businesses and research institutions from across our state to examine ways in which the State can better facilitate successful commercialization of technology developed at our State's research institutions. This process intends to more fully understand what's working, what's not, and what actions, if any, the State can undertake to improve the economic impact of technology commercialization within Washington.

Background

Important to any discussion of policies and practices that might aid in this regard is an understanding of the role played by technology transfer in, and the importance of other factors to, technology commercialization.

Commercialization involves a handoff from R&D organization to a commercial company.

Scientific breakthroughs are the result of the search for new knowledge within a research institution. Those breakthroughs offer benefit to people and economic growth to regions when they are incorporated into new products by a commercial enterprise. Thus, a handoff between the research institution and the company occurs at some point in the process. Commercialization is all about making this transition happen. Paving the way for a successful transition requires good communications, insight into the markets of the future, understanding of unmet market needs, willing partners on both sides, and enough money to satisfy the needs of the organizations involved.

Commercialization through technology transfer is relatively new.

Although the federal / state / commercial partnership implemented by land-grant universities since the 1800s moved technologies directly to the commercial sector without protection, licensing, or associated royalty charges, prior to 1980, licensing of technology to commercial enterprises was infrequently attempted. Prior to this time, the U.S. government retained ownership of most of the inventions resulting from federally-funded research. It was a difficult and time-consuming (and often unsuccessful) task for an institution to get permission from the sponsoring federal agency to seek commercial outlets for a technological innovation. With no proprietary right to grant and no incentive to seek commercial outlets, technological advances developed at universities and non-profit research institutions were rarely translated into useful products and services for the benefit of the public.

The 1980 Bayh-Dole Act places responsibility for technology transfer.

This changed with the passage of the Bayh-Dole Act of 1980 and its amendments of 1984 and 1986. The Act effectively transformed technology transfer from a passive to a more active process. It provided universities and non-profit research institutions with rights to the technologies and other intellectual properties resulting from research funded in whole or in part by the federal government. It also allowed them to license their technologies to the commercial sector and to use the proceeds from licensing to reward the inventors and to support scientific research and education at the

institution. Armed with property rights and the ability to create significant value from their inventions, academic and non-profit research institutions have, since that time, actively sought out new inventions within their institutions; protected those inventions through patent, copyright or other mechanisms; and, diligently pursued outlets for their commercial development.

Basic research is only the starting point for commercialization.

Universities and non-profit research institutions don't manufacture, market or distribute the fruits of their research. Instead, they rely on the tools provided them under the Bayh-Dole Act to seek licensees in the commercial sector willing to do so. The process of finding commercial outlets, however, is more difficult than many realize. Most of our research institutions engage in "basic" research which is defined by the National Science Foundation as being, "intended to gain more comprehensive knowledge or understanding of the subject under study, without specific applications in mind" (emphasis added).² Thus a significant portion of the inventions disclosed either have no immediately obvious commercial application or have not been pushed beyond the "proof of principal" phase in their development. This "technology" risk reduces the expectations of immediate returns and commensurately the interest of all but the most risk tolerant firms and individuals in licensing these technologies.

New ideas and technologies represent risk to established products and companies.

Another obstacle to finding willing licensees among established companies is the risk of disruption. Operating as they do at the boundaries of science and technology – especially with federal funding – our academic and research institutions occasionally discover breakthrough and/or disruptive technologies. These are technologies that represent such a radical departure from the manner in which current market needs are addressed that they require either the creation of new markets and/or threaten with extinction those who dominate existing markets. Established firms, understandably, are reluctant to embrace technologies such as these that may have the potential to render their investments in products, plants and equipment obsolete.

Innovative startup companies champion disruptive technologies.

Technology-based startup companies, including small emerging businesses, represent a particular class of licensees for whom these obstacles are less problematic. They typically demonstrate higher risk tolerances and have historically contributed to the process of championing the commercialization of very-early-stage technologies that suffer from either "technology" or "disruption" risks. In addition, according to the most recent survey data from the Association of University Technology Managers, 83% of startups remain within the same state of the institution from which they received their technology.³ Thus, while they are by no means always successful, statistics from the 2002 survey reveal that 63% of new companies started since 1980 are still in operation.⁴

Directing economic impact to a specific region is difficult.

Licensees are under no obligation to undertake any economic activity (i.e. company operations) in the region from which the licensed technology arises. This blunts the precision with which technology transfer can be used to encourage the focused expansion of technology-based economic activity. For the reasons outlined above, technology transfer to local startup companies is likely to be a more effective tool for stimulating economic activity.

However, in executing its responsibility to ensure that R&D results are used, about 10 licenses are awarded to existing product companies for every license that is awarded to a startup company. Again, this limits the effectiveness of technology licensing as a state economic development tool.

⁴ *Ibid*., p.23.

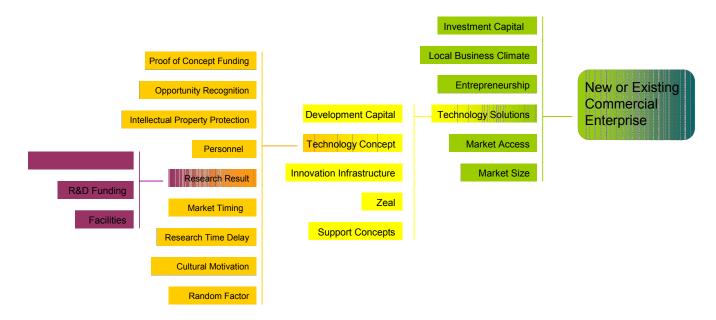
¹ Howard Bremer, Catherine Innes, Christopher McKinney, "Academic Technology Transfer: Driving the Public Use of University Research Results," Association of University Technology Managers, Educational Series No. 6, 2004. p. 2. ² Gregory Graff, Amir Heiman, David Zilberman, "University Research and Offices of Technology Transfer," <u>California Review</u>

of Management, Vol. 45, No.1, Fall 2002, p. 91. AUTM Licensing Survey: FY2002 Edited by Ashley Stevens, Association of University Licensing Managers, 2003, p. 21.

Technology Commercialization Process

The Evolution of an Idea

Translating an idea into a commercial success is not a simple task. Rather it is one aspect of an interplay between multiple factors that can result in commercial success. For our purposes, this discussion will focus on those commercially successful enterprises that incorporate a new technology or innovation. Other models might involve existing technologies, products or business models that could be the basis for a profitable business; however, here we will focus on the relationship between technology and commercial success. Technology transfer is just one step in the commercialization process. Along each step of this path, an array of factors must be present for the process to be successful, and each step depends on successful outcomes from the stage preceding it.



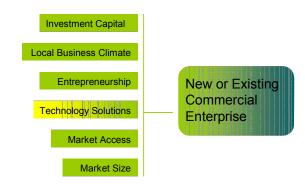
What it Takes to Create a Successful Technology-Based Enterprise

Starting at the right-hand side of the above diagram, at least six elements contribute to a commercially-successful technology-based enterprise. Each is a critical component, with no single element commanding a majority role. In turn, each component is composed of a separate group of factors. For this discussion, we will follow in some detail one of these paths – the Technology Path – to illustrate its role in technology commercialization.

New or Existing Enterprise:

Six critical elements contribute to the building of a successful technology-based commercial enterprise:

- Investment Capital: Willing, supportive capital resources available to be invested into the enterprise.
- Local Business Climate: Supportive infrastructure of public services (e.g. available facilities, land, taxes, policy), suppliers, and support organizations (e.g. legal, financial, marketing, production services).



• **Entrepreneurship:** personnel who have the experience, skill and personal traits to launch, support, manage and promote the new enterprise.

- **Technology Solutions:** Available, appropriate, demonstrated technology-based products or processes. Ideally, the embodied technology(ies) provide the freedom to deploy products in the chosen markets and create a barrier to make competitor entry difficult.
- Market Access/Channel: Demonstrated, reliable and affordable mechanisms (channels) for the company to deliver its products and services into their target markets.
- **Market Size:** Target market for the company's endeavors large enough to provide a return to the investors and well-defined enough to provide clear product definition to the company.

Technology Solutions

The Technology Solution level is the result of five critical elements coming together.

- Product Development Capital: Sufficient capital to allow the development of prototype and demonstration products. The performance and
 "manufacturability" must be demonstrated.

 Development Capital
 Technology Solutions
- **Technology Concept:** One or more scientific or IP-based ideas that have been shown to have potential commercial value. The market application must have been identified and the expected distinctive benefits of this technology concept must have been outlined with respect to the targeted market areas.
- Development Capital

 Technology Concept

 Innovation Infrastructure

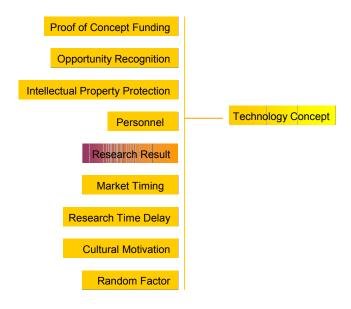
 Zeal

 Support Concepts
- Innovation infrastructure: The local environment must support entrepreneurs, technology developers and researchers by providing an easy, free-flowing exchange of ideas and best practices. In addition, facility, mentoring, and business planning support must be available.
- **Zeal:** At the pre-enterprise stage, there need to be fully-committed technology and entrepreneurial champions with the energy, enthusiasm, competence, perseverance and high tolerances for risk and technological ambiguity who are willing to "invest" the time and effort to successful transform the technology concept into a viable product
- Support Concepts: Business models, marketing channels and other business dimensions must also be outlined that mutually support the technology concept.

Technology Concept

This phase has the most variables, with eight components needed for advancement towards a commercially successful enterprise.

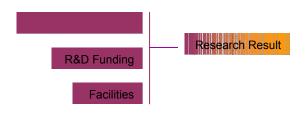
- Proof-of-Concept Funding: Capital/funding available to investigate the commercial viability of a scientific or research result in a particular market segment.
- Recognition of Commercial Opportunity: Ideas about those applications in which the research result might be valuable. This is typically the result of a creative insight and experience, not a prescriptive process.
- Intellectual Property Protection: Investment in protection, either by patent, copyright or trade secret, to protect the features of the Research Result that may become a commercial product.



- **Personnel:** Selecting and recruiting appropriate people to carry the scientific concept through this stage of its development.
- **Research Result:** Scientific, viable results from a research project that outline a new physical, biological or other process, material or mathematical relationship. At this point the science is proven, but a practical/market application may have only been suggested, not exhaustively investigated.
- Recognition of Market Timing: Ability to recognize when a research result will be complete and the target market may be ready for its adoption. Too early and no one will buy; too late and the market will be very crowded.
- Research Time Delay: There is a natural lapse of time between the announcement of research findings and the recognition of its significance to a market. This lag time varies across research disciplines, and in some cases may be measured in years.
- Cultural Motivation: Degree to which the innovation culture of the research and entrepreneurial communities as well as the investment, business and public policy sectors encourage or discourage risk taking and creativity in technology development.
- Random Factor: Sometimes called the "crystal ball factor," this is included to suggest that other less easily identified factors can also influence outcomes.

Research Result

Research Personnel: Scientists and engineers, including graduate students and post-doctoral fellows who conduct research. At universities and non-profit laboratories there may be hundreds of individual researchers working on hundreds of different research projects at any given time. And, at any given time, only one out of a hundred of



these researchers may produce anything having commercial potential. For example, the portion of Washington State's research university faculty engaged in research with commercial potential is about 1% (estimated by University of Washington and Washington State University). Therefore, in Washington State, 300 to 400 faculty are targets for "commercializable ideas."

- **Research Funding:** More than \$2B annually comes into Washington from federal sources at this level.
- **Research Facilities:** Research facilities and equipment.

What is Technology Transfer?

Technology transfer is the process by which knowledge, technology and science developed by researchers in academic institutions or laboratory facilities are transferred to the public or private sector for the purpose of developing it into a marketable process or product. The technology transfer process is shared among a variety of partners, including:

- Universities
- Industries and Businesses
- Public Laboratories
- Non Profit Research Institutions
- Federal, State and Local Government

From the state or federal government standpoint, the potential for technology transfer is measured in how the research will have practical application for public benefit. From

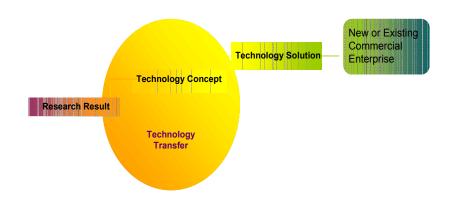
industry's standpoint, it is how the research will advance a company's growth and competitiveness. From an economic development standpoint, these two interests merge to determine how the research may ultimately translate into jobs, contributing to existing industry clusters that fuel a multiplier effect on our state's applicable employment base.

What is the Role of Tech Transfer in Commercialization?

Technology transfer identifies innovations in research, protects them as appropriate and makes them broadly available to the commercial sector for translation into goods and services. Technology transfer, then, provides for a collaborative transition of innovations in science and technology into the private sector for their further development and commercialization. For the transfer to be successful, the following factors must all be in play.

Identification: Newly created Research Results must be disclosed and evaluated for commercial potential.

End Users: There need to be companies and investors that have available the culture, resources and time necessary to incorporate new ideas into product development schemes.



Transfer: The transition of these innovations to the private or public sector to facilitate the further development of the Research Results and Technology Concepts into new products, processes, materials, or services that enhance industry competitiveness.

Development: Resources must be in place to assist in providing sufficient ongoing investment and development to turn Research Results and Technology Concepts into Technology Solutions that drive the development of new products. These include funding sources, partnerships, and support services.

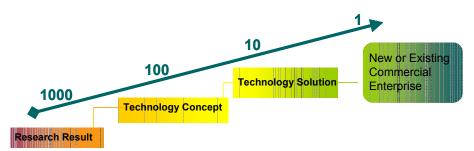
This ongoing support infrastructure encourages:

- Further R&D activities
- Early-stage, angel, and venture capital investment in technology companies
- Profitability from spin-offs, market share, licensing royalties
- Employment growth and new job creation
- Improved consumer products and services.

Ratio of Ideas to Companies

Many people believe there is a correlation between research funding and company starts. There is. However, as discussed above, the process of moving from raw technology to transferable technology to commercial technology-

based products and successful new businesses requires a number steps that make the ratio between company starts and research funding non-linear.



Nationally, the Association

of Technology Managers (AUTM) finds that on average there is one new company created for each \$60 million spent on research. National statistics show that spinout / start-up from university technologies account for 0.1% (1 in 1000) of the total number of start up companies. This translates roughly into one new business start for every 1,000 research projects as an average estimate; actual data varies widely based on many factors already discussed. However, this ratio varies in accordance with the presence of the myriad of other factors needed make it possible to move from raw technology to company starts. Entrepreneurs and the commercialization process rely on the presence of investment capital (at several levels), the zeal of technologists willing to invest their time and talents, and the presence of markets to transform raw technologies into commercially relevant products and companies.

Additional data compiled by AUTM suggests that only a fraction of the license transactions completed by research institutions are done with start-up companies and that many more Research Results and Technology Concepts are licensed to existing companies—large and small—for incorporation into existing product lines.

Whether technology-based companies are retained in the region that produced the technology and whether they experience higher or lower than average rates of success is dependent in large part on the state and local business climate and the regional infrastructure in place to nurture and support them.

Appendix E: Draft Update Strategy for the Statewide Strategic Plan for Economic Vitality

Phase I Timeframe: January, 2005

❖ Each agency of the Joint Economic Vitality Cabinet prepares a **short issue paper** addressing its specific areas related to the state's economic vitality. Each paper will include:

- Highlights of the state of Washington in that area
- Relevant data and statistics
- Areas where Washington is strong
- Areas where Washington needs focus

Phase II Timeframe: February, 2005

- ❖ The Commission will engage in dialogue with agencies to explore connections between economic vitality and the agency missions.
- ❖ Based on dialogue with the JEVC and the agency issue papers, the Commission will develop a targeted, strategic set of priorities to determine the critical areas of focus for the state.
- ❖ The targeted set of priorities will be used to revise the framework of the statewide strategic plan.

Phase III Timeframe: March-April 2005

- ❖ Based on the revised framework, the Commission and JEVC will identify a list of challenges and develop an action agenda for the state to accomplish. For each challenge identified, the document will specify the following:
 - Specific strategies or initiatives for the state that one or two agencies can assume the lead for.
 - Performance measures to gauge the success of the action agenda.
- ❖ The challenges and action agenda will be developed with input from key stakeholders around the state.

Phase IV Timeframe: May 2005

❖ Agencies will prioritize their strategic plans around the statewide strategy.

Phase V Timeframe: December 2005

❖ The Commission will develop a report to the Legislature on the status of the Statewide Strategic Plan's implementation.